

MASSACHUSETTS PLOUGHMAN

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MASSACHUSETTS PLOUGHMAN
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the open air to locate their hive and gain strength for the heavy labors of the field. There are many ways of introducing queens, but no sure way that will at all times and under all conditions prove successful. I have for a number of years tried a method which has proved successful.

Go to a hive to which to introduce a new queen, take out about four frames of capped brood with all the adhering bees, and put them into an empty hive. (But be sure you leave the old queen in the old hive.) Place on top your queen cage containing the new queen, close up the hive, and contract the entrance to about one inch space with a little block of wood. The

ter; up at three o'clock, and the men, too. Hired the cheapest men and tramps that nobody else would have; fed them like hogs and hammed them out of work out of them. Bailed about everything he used on his own farm. Never spent a cent without questioning it. Worked one wife to death and scolded his boys and girls. Made some very sharp trades, though not called dishonest. Sold live stock, butter and hay farmed by old-fashioned methods, and laid up money right along. Sharp as a hatchet and just as hard.

He certainly had no help from new ideas," I observed.

"That was farming by main strength. Now compare Farmer Ryder."

feed the two hundred million Americans who live in fifty years, constitute this nation's problem.

"We are wasting the resources of our land," Mr. Hill writes, "and of our sales and markets we are already in exhaustion. What will take the place of these things? Iron and coal and oil, our lumber and timber, the virgin fertility of a soil fast being exhausted? The security of the nation must be in its soil," said Mr. Hill, and in the Secretary Wilson agrees. "The soil," said the Secretary of Agriculture, "must bring forth new forests in place of those that have been cut down; it must give power and heat and light for the tens of millions of mankind when the coal and oil shall have

cessful by men who make a study of agricultural problems. This, it was explained by one of the returned scientists, is the purpose of agricultural education. Not much practical instruction can be given, except in such States where are established model farms and dairies. The country children learn a great deal of farming in a practical way at home, but at school they are taught how to run a model dairy, farm, orchard, poultry-yard, etc., and why certain farmers are successful and others are not. These plans, it is argued by the department, will do more to keep the farm boy on the farm than any argument of sociologists.

In a few of the more progressive States

production. When fattening operations can be conducted without the additional expense of labor, a great problem in live stock production has been solved in favor of the producer. By fattening upon pasture the farmer is able himself to handle several hundred lambs at a very depreciable cost, thus materially increasing the profitable side of the enterprise. Were it not possible to purchase the necessary material early in the fall the farmer would be compelled to either lose the second growth of hay or involve the expense of harvesting the crop, as the feeding operation generally supplies plenty of manure to go back upon the land to maintain fertility. The fattening of lambs upon pasture also has the advantage of restoring soil fertility in a very economical manner. The lambs in the course of a few days after arriving at the farm are turned into the field to graze. They roam the pasture from morn to eve, not only cropping the green forage, but leaving behind excrement that more than replaces what they have taken. At night they lay down upon the knolls, thus enriching the most needed of the soil. Fields that have been pastured for a few years in this manner during the fattening process have noticeably increased in fertility.

TIME TO PURCHASE.

Purchasing time with most farmers who have followed the business for several years depends upon the season to a large extent, as the pasture on the farm and supply of lambs ready for shipment in the West are governed by this prevailing condition. During the latter part of the month of August and early September are most favorable, as it gives the lambs the best pasture and longest time to graze. The purchasing is done through two courses. Either the lambs are purchased upon the larger markets, where they are shipped direct from the producer, or in case a large number are needed to supply several farmers, a buyer is sent on to the range and makes his purchases directly from the owner of the lambs. The latter practice in the last two or three years has been most prevalent, as it gives the purchaser a better opportunity to select his stock and also to make direct shipment to the farm. Farmers who have received stock in this way are pleased with their bargain. It not infrequently happens, in order to supply the demand, many lambs have to be purchased upon the range market, as the supply in many instances is limited.

KIND OF LAMBS DESIRED.

The kind of lambs that has given the best results on pasture fattening weigh anywhere from forty to sixty pounds per head at the time they arrive at the farm. The lambs most desired are those that possess stamina to a marked degree. When the lambs are brought eastward a marked change in climatic and grazing conditions is forced upon them. If they cannot endure the change they are of no value to the feeder, as they either die or fail to fatten. In the selection of lambs for pasture fattening too much stress cannot be laid upon the endurance qualities. The feeder wants lambs that as soon as put upon good feed will begin immediately to take on flesh, as it is desirable to place them upon the market again as soon as possible. We have found that the lighter and less thrifty class of lambs are very undesirable material and practically worthless. Lambs possessing strong marked indication of Merino type produce the most satisfactory lambs for pasture fattening.

NATURE OF PASTURE.

The nature of the pasture for conducting the operation of fattening lambs is of much importance in relation to making the enterprise a success. Land upon which the work is conducted must produce a large amount of palatable pasture, as the greater portion of profitable gain must come from this source. Meadow lands possessing good producing soils, with so moist moisture to stimulate grass growth during the late summer months, will supply acceptable pasture for lamb fattening. The forage must in no sense be tough or undesirable food, as the lambs fail to relish it and make profitable gain. In case the second crop has made vigorous growth a second clipping will stimulate the underground roots to throw out a new growth that makes very palatable sheep feed. Where there are two or three meadow fields to be pastured an alternation frequently will stimulate materially the forage growth, and at the same time keep the lambs supplied with acceptable pasture.

SOME GRAIN NECESSARY.

In order to make the lambs fatten rapidly it is necessary to add a grain ration to the pasture. At this season of the year pasture growth has lost its greenness and is becoming more or less dry. The grain ration consisting of oats, corn and either oil or cottonseed meal constitutes the prevailing additional grain. We have found that a ration possessing about a third oats, two-thirds corn, with a light additional amount of either oil or cottonseed meal, stimulates the appetite and causes the taking on rapidly of flesh. The grain is supplied twice daily in troughs about the field at convenient feeding places. When the operation of fattening lambs upon pasture is properly conducted it has proven quite profitable, taking one year and another.—Chicago Drovers' Journal.

ADVANTAGES OF PASTURE.

Pasture in all enterprises of live-stock operations furnishes a most economical means of production. Farmers are fast coming to recognize this fact, and are evidently taking advantage of every afforded opportunity to fatten their stock upon green feed. The fattening of lambs upon late summer and fall pasture furnishes a means through which the farmer can meet the demand of early winter market long before winter-fed stock could be prepared for shipment. The lambs in reality are put upon feed nearly sixty days earlier than would be advisable to put into the fattening pen. The warm weather during late summer and early fall has a too over influence upon the fattening progress of lambs to make early high feeding profitable, while in pasture fattening, this advantage is entirely eliminated. It means the cost of



BLACK ROCK, GRAND CHAMPION OF INTERNATIONAL STOCK SHOW.

older bees will leave the hive and join the one on the old stand, and the young bees will liberate the queen in two or three days and accept her all right. After she begins laying nicely, you can go to the old hive and kill the old queen. After two days of queenlessness, the bees in the old hive can be taken out, frames and all, and transferred into the new one, and they will almost always unite peacefully. The advantages of this method are that you can introduce a queen the same day you receive her, and the old queen also keeps on laying all the time, while the young one is being introduced.

Leonie, N. J. F. G. HIRMAN.

Two Kinds of Farming.

"It is hard work all the same," I insisted, to John Joy, who was milking a cow. For some reason a man is always ready to talk while milking. "You may call farming a profession, an art, a game, or anything you please, but your back will ache at night just the same."

"Nothing that sleep will not cure, which is more than can be said of most other interesting occupations," rejoined John.

"Of course it's work, but there's something to think about. Thinking helps make work pleasant as well as successful. But don't let any one give you the notion that ideas alone will make a farmer prosperous. It is a business, and a closely crowded one at that. Thousands of men, sharp, keen and capable enough by nature to have made good lawyers, merchants or engineers, are doing their utmost to push to the front in farming, but they find they must work. Better have energy and managing capacity with old ideas and methods than progressive ideas without a man of action behind them. Don't imagine in the first flush of a new idea that it will make you rich, and don't suppose that a young man has no chance to succeed by the old paths of plain, hard work and economy. A man who makes twice as long work days as another may do some unprofitable and ill-judged labor and still have quite a margin to spare. Good use of evenings may alone mean a surplus for his bank account."

"Then you believe theory is liable to be valued too high?" I queried.

"Yes, by the young agricultural student at least. Energy and business capacity are the great foundation. Farming is not as new as many of our institute speakers would have us believe. Our grandfathers would not be depressed out of the race given they in business today. But still knowledge is power, and new ideas, wisely selected, help the brain save the arms."

"As, for instance, when you showed me how I could irrigate my strawberries and net \$75 instead of \$25. You saved me from working nights to earn \$20."

"Yes," replied Joy. "I find it pays me better to think than work evenings. Sometimes I am obliged to do both, I admit. But there are many roads to money making. Take Farmer Walker, for example. He gives them in business today. But still knowledge is power, and new ideas, wisely selected, help the brain save the arms."

"Yes," full of steam as an engine. Working fourteen hours, summer and winter,

"He is pretty well off, too."

"Began with a hired farm and next to no money," continued Joy. "Was quite a student, especially of cattle feeding and fertilizers. Was very enthusiastic over his farm; spent all his spare money for years toward improvements. Gradually built up a big business selling milk at retail. Was one of the first to use silos. Set out many fruit trees. Was prominent in work of church and grange. Sent most of his children through college. Was generous to charity and to his relatives. Began to make a good deal of money at about forty years of age, and is now making more from his business than anybody in town. He has a valuable property which he has improved year by year, until it is an attractive home as well as a rich farm."

"I see the point, John. There is a narrow way and a wide way to money making, and a young man may take his choice."

"He can coin dollars out of his own flesh, blood and bones, if he likes that kind of farming, but there are other ways for capable men to succeed. Perhaps we can't all do like Farmer Ryder, but I intend to try."

G. B. FINE.

Middlesex County, Mass.

The Eight Hour Question.

Among the most serious questions that confront the farmers of the country is the "help" question and the probable bearing the enforcement of an eight-hour law will have upon it. All industries and all business depends upon the smooth relations that should exist between the employer and the help.

Our farms cannot be maintained without the diligent work necessary, and how to secure in a reasonable way proper assistance is fast becoming one of the worst propositions the farmers of America have been called upon to cope with.

How long the present dividing line will be drawn between the long hours now customary on the farm and the short time enforced by the new eight-hour law on all public works, remains to be seen. But knowing the shifting disposition of the average hired man, we predict a speedy realization of the situation. If men receive the same pay for an eight-hour day that they did when working ten hours, then how can farmers expect their men to be willing to work a twelve or fourteen-hour day and be satisfied with pay they now command?

As the matter stands here in old Massachusetts, the average hired man receives certainly \$40 per month when he lets for \$15 and keeps, and this is setting his beard and laundry bills at very moderate figures.

Massachusetts.

J. W. BOWMAN.

Notes from Washington, D. C.

OURIVATOR OF THE SOIL AMERICA'S

"Every one of this country is good for something." This, in a nutshell, is the answer of Secretary Wilson of the Department of Agriculture to the question asked by Jim Hill, railroad king and financier, in an article written by him, "How shall we

been exhausted; it must develop substitutes for the iron that cannot last long. And all of these it will do, and it is now doing.

"With regard to the exhaustion of wood, oil and coal, the farmer will meet that," continues the secretary. "Congress has taken the first step in granting free alcohol, and this department is at work learning what can be done to develop its possibilities. The chemists are working at a big canner in Illinois to learn how to produce alcohol cheaply from the byproducts of that business, and we have an expert in Europe to study and bring back supplies of seed for production of the big stock potato raised there for alcohol and stock feed. Still other experts are studying the uses of alcohol, heat and power."

The Secretary of Agriculture believes that the fertility of our soil can be kept up by crop rotation, and cited a number of cases in Iowa where from thirty to forty bushels of wheat were obtained by this method, whereas the average in this country is a little less than fifteen.

"There need be no fear of the capacity of the soil to feed the people Mr. Hill expects to see here," remarked the secretary, "and I don't question his figures, either. We will have them, but we must have different farming methods. Every acre of this domain is good for something. We are raising the spindless cactus on the sands of the Mojave desert and feeding cattle on it to determine how the results compare with those in more favored sections."

AGRICULTURE IN THE SCHOOLS.

Agriculture being the basis of the prosperity of this country is now being added to the curriculum of the public schools in more than a dozen States of the Union. The United States is the first country to make this new departure, for the far-sighted men of the country are being made to understand that without agriculture this country will not be able to keep its place at the head of all nations. The science of husbandry is to the country schools what manual training or cooking is to those of the city, and every effort is being made by agricultural scientists to improve the methods of instruction and get as much practical benefit as possible. The experiment stations connected with the department of Agriculture have been called into service to render as much assistance as possible to these schools, and to disseminate information among the communities that need it.

A number of the experts of the Department of Agriculture have returned to Washington after making lectures in different States to teachers' institutes and normal schools. It is considered probable that some thousand or twenty thousand teachers are now reaching last year through life lessons, and the work is spreading and growing in popularity.

Farming is a great many sections is still being run on the old rule of the thumb, or according to practices adopted by fathers, grandfathers or great grandfathers, rather than according to science found to be successful.

model agricultural schools have small farms and dairies attached, and the pupils are given a chance at practical farming, planting and cultivating grain, flowers and trees, the management of stock, and are shown the practical difference between dairy and meat stock, the methods of butchering and the approved ways of meat, the different breeds of horses for draft and driving, and are given the practical reasons underlying plowing, cultivating and all the annual round of farm labor. The idea is to give them an intelligent interest in farm work and open their eyes to the possibilities of improved methods and altogether rear a more intelligent race of young farmers, who, when they stick to the soil, will know how to make the most out of it, and take the fullest advantage of the life in which their lot is likely to be cast.

GUY E. MITCHELL.

Notes from Pasture.

Purchasing lambs of Western growers as early as marketable and shipping into the lamb-raising districts to be fattened upon pasture specially prepared is becoming a repeated practice among farmers in several localities, and one that for a few years past has been judiciously conserved soil fertility, and by the application of manure derived from winter feeding increased the productivity of their farms, so that they are able, after removing a heavy hay crop, to produce a second growth of very palatable pasture, this practice of buying up early feeders of Western production is a highly commendable one. Farmers who have foreseen the advantages of making every acre of tillable soil return as large a profit annually as possible, and at the same time till their soils to increased productivity, are finding a ready market for fattened lambs at good profit earlier in the season than the winter feeder is able to market his later purchases. The American people are constantly demanding fresh mutton and are willing to pay a discriminating price in favor of the freshly produced meat if it can be prepared and put upon the market as many months of the year as possible.

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Dairy.

Fifty Dairy Rules.
THE OWNER AND HIS HELPERS.
Read current dairy literature and keep posted on new ideas.
Observe and enforce the utmost cleanliness about the cattle, their attendants, the stable, the dairy, and all utensils.
A person suffering from any disease, or who has been exposed to a contagious disease, must remain away from the cows and the milk.

THE STABLE.
Keep dairy cattle in a room or building by themselves. It is preferable to have no cellar below and no storage loft above.
Stables should be well ventilated, lighted and drained; should have tight floors and walls and be plainly constructed.
Never use dusty or dirty litter.
Allow no strong smelling material in the stable for any length of time. Store the manure under cover outside the cow stable and remove it to a distance as often as practicable.
Whitewash the stable once or twice a year; use land plaster in the manure gutters daily.
Use no dry, dusty feed just previous to milking; if fodder is dusty, sprinkle it before it is fed.
Clean and thoroughly air the stable before milking; in hot weather sprinkle the floor.
Keep the stable and dairy room in good condition, and then insist that the dairy, factory, or place where the milk goes be kept equally well.

THE COWS.
Have the herd examined at least twice a year by a skilled veterinarian.
Promptly remove from the herd any animal suspected of being in bad health, and reject her milk. Never add an animal to the herd until certain it is free from disease, especially tuberculosis.
Do not move cows faster than a comfortable walk while on the way to place of milking or feeding.
Never allow the cows to be excited by hard driving, abuse, loud talking or unnecessary disturbance; do not expose them to cold or storms.
Do not change the feed suddenly.
Feed liberally, and use only fresh, palatable feed stuffs; in no case should decomposed or moldy material be used.
Provide water in abundance, easy of access, and always pure, fresh, but not too cold.
Salt should always be accessible.
Do not allow any strong flavored food, like garlic, cabbage and turnips, to be eaten except immediately after milking.
Clean the entire body of the cow daily. If hair in the region of the udder is not easily kept clean it should be clipped.
Do not use the milk within twenty days before calving, nor for three to five days afterward.

MILKING.
The milker should be clean in all respects; he should not use tobacco; he should wash and dry his hands before milking.
The milker should wear a clean outer garment, used only when milking, and kept in a clean place at other times.
Brush the udder and surrounding parts just before milking, and wipe them with a clean, damp cloth or sponge.
Milk quietly, quickly, cleanly and thoroughly. Cows do not like unnecessary noise or delay. Commence milking at exactly the same hour every morning and evening, and milk the cows in the same order.
Throw away (but not on the floor—better in the gutter) the first few streams from each teat; this milk is very watery and of little value, but it may injure the rest.
If in any milking a part of the milk is bloody or stringy or unnatural in appearance, the whole mass should be rejected.
Milk with dry hands; never allow the hands to come in contact with the milk.
Do not allow dogs, cats or loafers to be around at milking time.
If any accident occurs by which a pail full or partly full of milk becomes dirty, do not try to remedy this by straining, but reject all this milk and rinse the pail.
Wash and rinse the pail given by each cow, and take a sample morning and night, at least once a week, for testing by the fat test.

CARE OF MILK.
Remove the milk of every cow at once from the stable to a clean, dry room, where the air is pure and sweet. Do not allow cans to remain in stables while they are being filled.
Strain the milk through a metal gauze and a flannel cloth or layer of cotton as soon as it is drawn.
Aerate and cool the milk as soon as strained. If an apparatus for ailing and cooling at the same time is not at hand, the milk should be ailed first. This must be done in pure air, and it should then be cooled to 45° if the milk is for shipment, or to 60° if for home use or delivery to a factory.
Never close a can containing warm milk which has not been aerated.
If cover is left off the can, a piece of cloth or mosquito netting should be used to keep out insects.
If milk is stored, it should be held in tanks of fresh, cold water, renewed daily, in a clean, dry, cold room. Unless it is desired to remove cream, it should be stirred with a stirrer often enough to prevent forming a thick cream layer.
Keep the night milk under shelter so rain cannot get into the cans. In warm weather hold it in a tank of fresh, cold water.
Never mix fresh, warm milk with that which has been cooled.
Do not allow the milk to freeze.
Under no circumstances should anything be added to milk to prevent its souring. Cleanliness and cold are the only preventive needed.
All milk should be in good condition when delivered. This may make it necessary to deliver twice a day during the hottest weather.
When cans are hauled far they should be full, and carried in a spring wagon.
In hot weather cover the cans, when moved in a wagon, with a clean wet blanket or canvas.
THE UTENSILS.
Milk utensils for farm use should be made of metal and have all joints smoothly soldered. Never allow them to become rusty or rough inside.
Do not haul waste products back to the farm in the same cans used for delivering milk. When this is unavoidable, insist that the skimmilk or whey tank be kept clean.
Cans used for the return of skimmilk or whey should be emptied and cleaned as soon as they arrive at the farm.
Clean all dairy utensils by first thoroughly rinsing them in warm water; then clean inside and out with a brush and hot water in which a cleaning material is dis-

solved; then rinse and, lastly, sterilize by boiling water or steam. Use pure water only.
After cleaning, keep utensils inverted in pure air, and can if possible, until wanted for use.—S. C. Thompson, Maine State Dairy Instructor.

Literature.

WITH ROGERS' RANGERS.
The popularity of the Woodranger Tales will be greatly increased by "With Rogers' Rangers," the latest of the series which has added so much to the reputation of G. W. Brown as a raconteur of unusual vigor, and as a weaver of historical facts into a story of thrilling incidents and vivid characterization. The present tale has to do with the English colonists in New England and New York, and the French of New France, now Canada, and the Indians, their savage allies. The final defeat of the French in their efforts to maintain their power over the lands claimed by the English was not due to the troops furnished by Great Britain, but rather to Rogers and the Starks and their courageous band of woodrangers, who were familiar with every foot of the disputed ground, and which they made notable in story and in song through their deeds of perilous daring and heroic enterprise. Nothing could daunt their bravery in the hour of danger, and in the present narrative the leaders are depicted with a fidelity that brings them distinctly to the mind, and makes them strikingly impressive whether in repose or action. The picturesque aspects of the period painted have been fully grasped by the author, and the result is a tale of remarkable action and color that is constantly absorbing. (Boston: L. C. Page & Co. Price, \$1.25.)

THE ESSENTIALS OF HEALTH.
Revised edition of "The Essentials of Health," by Charles H. Stowell, M. D., has been issued in accordance with public demand. In its present issue its practical, hygienic teaching has been greatly elaborated, and many new illustrations have been added, including four full-page diagrams in a new and original style, and four colored plates. The text, we are assured by the author, complies with the laws regarding the teaching of physiology and hygiene with special reference to the effects of alcohol and other narcotics on the human body, as enacted by the several States. The volume is intended as a text book of anatomy, physiology and hygiene for use in the seventh and eighth grade mar grades, or for corresponding classes of ungraded schools, and it has received the highest endorsements from reformers, physicians and educators. (Boston: Silver, Burdett & Co.)

THE LION AND THE MOUSE.
All playgoers are familiar by this time with "The Lion and the Mouse," by Charles Klein, a piece of dramatic work that has met with what the press agents call phenomenal success, and which is now being acted by at least three companies of players in different parts of the country. It is not strange, therefore, that this successful piece has been turned into a novel by Arthur Hornblow. He has preserved all the essential features of the original effort, uniting the various scenes with an abundance of interesting narrative, but still preserving the rapid movement and pointed, significant and natural dialogue which have brought Mr. Klein both fame and profit. The financier, John Barlett Ryder, the richest man in the world, is quite as strongly individualized in the story as he is in the play, and so is Shirley Rosemore, the woman who succeeds in soft-

ening his not entirely obdurate heart, and in wedding his son, who is entirely opposed to his father's business methods. Some people have associated the name of the elder Rockefeller with the multi-millionaire magnate in this book, but the resemblance between the two is only of a general character, and the heroine is not much like the magazine writer with whom she has been compared, except in the fact that she does portray the personality of a big figure in commercial life in periodical literature. The novel will apparently attract quite as much public interest as the dramatic presentation of the power of our multi-millionaires in advancing their own interests and adding to their colossal gains. (New York: G. W. Dillingham Company. Price, \$1.50.)

SANITARY AND APPLIED CHEMISTRY.
E. H. S. Bailey, professor of chemistry in the University of Kansas, has furnished a book of great information worth for educational institutions and for reference in "A Text Book of Sanitary and Applied Chemistry, or the Chemistry of Water, Air and Food." This comprehensive subject is amply covered in these pages, which give a clear and connected view of chemistry in the direction of its application to daily life. Much material has been collected from Government reports and other sources, and utilized effectively in these pages, and the author has endeavored to introduce enough facts to render the subject intel-



PACKING MUSKELONGS.

Busy scene on a large Rhode Island truck farm.

ligible without elaborating details, which should properly find their place in a more voluminous treatise. The book is admirably divided by subheads, and all the topics discussed are progressively set forth in a manner that will be readily comprehended by the intelligent student. In the introduction it is wisely said: "A thorough understanding of the facts of applied chemistry will not make the skilled workman, nor will the theories of chemistry make the accomplished cook, but a broad and thorough knowledge of the underlying principles will go very far toward developing common sense in hygiene and in the selection and preparation of food." The book is one that should find a place in every advanced school and in every domestic library in up-to-date households. (New York: The Macmillan Company. Price, \$1.40.)

The Golden Chronicle.

The unselfish work of a woman who had been an angel of mercy as an army nurse during the Civil War led to the establishment of the Cambridge Hospital, one of the most beneficent institutions in the neighborhood of Boston. This woman was Miss Emily Parsons, who in 1867 opened a hospital in the University City for women and children. At first her enterprise did not meet with the encouragement that her devotion deserved, and after a year's patient labor, no fitting house being found to accommodate the institution, it was dis-

continued with the charity of the world, the Mount Mansfield, where Parsons are not too deep for the beneficence of the hospital of mankind. (New York: Thomas Whitaker. Price, 75 cents net.)

The Cambridge Hospital receives no assistance from the city where it is located. It has to depend to a large extent upon donations and legacies, for the income received from its invested funds does not begin to pay running expenses, which sometimes exceed the receipts by over ten thousand dollars.

The charitable disposed can help to extend the good work of the institution by joining the Women's Aid Association, which supplies a large part of the bed linen used, and by donations to be used in principle or interest to help pay current bills, or by supporting a free bed. The cost of maintaining the latter for one year is \$300, and various societies and churches have generously come forward to aid in perpetuating this indispensable feature of the hospital.

A gift of \$10,000 establishes a free bed in perpetuity, and a present of \$5000 establishes a free bed for the period of two lives, i. e., the donor, and a successor, to be named by the donor, may send a patient free of charge. Mrs. Francis Foster, Mrs. J. Warren Merrill, Mrs. Goodnow and Henry W. Faine are among the personal benefactors, while F. S. Dixwell, H. O. Houghton, Miss Anna J. O. Stevens, J. W. Cook, Mrs. Josiah M. Fiske, Samuel Slocum, Mrs. Julia A. Harding, Mrs. Charles L. Jones, Mrs. William W. Wellington, and James A. Woolson are among those who have given the funds to support free beds for two lives.

Application for admission of patients may be made at the hospital on week days from 11 to 12 A. M., and should be accompanied by a full written description of the case by the attending physician. Patients must not be sent to the hospital before an agreement has been made to receive them, except in case of accident. Accident cases are received at all hours. Out-patients with diseases of the throat and ear received Monday and Friday at 4 P. M. Other out-patients received between 10 and 11 A. M., week days only. Chronic diseases and contagious diseases, except scarlet fever and diphtheria, are not admitted. Patients are allowed to see one visitor only from 3 to 4 P. M. on week days. Board in the wards is \$10 per week. Board in the contagious ward is \$30 per week. There is accommodation for four (4) private patients at \$40 per week. Permission to occupy a

THE "DISC" SYSTEM OF CREAM SEPARATION

Judging outward appearance alone, it might be reasonably assumed that one cream separator is as good as another. However, as the outside of the machine does not do the separating, we must look deeper for the real merits of the separator. Upon the construction of the gearing depends durability and operating ease which, of course, should be carefully examined, but the really important feature is the construction of the bowl. This is what does the work, be it good or bad. Exhaustive tests have proven that the best results can only be obtained when the separator bowl contains a series of concentric, slanted, imperforated discs, dividing the milk into strata or thin layers. But a bowl which does not contain discs of this particular kind, no matter how good work with warm milk and by running at a high speed, but where a heavy cream is desired, or cold or thick milk is to be separated, as frequently happens in farm use, these separators lose a big percentage of the butter fat and consequently the profits. The original "disc" system as today used exclusively in building the DE LAVAL cream separators, is just as important to the separator as the guard is to the sickle bar of a mowing machine. The DE LAVAL "disc" system assisted by the "split-wing" device, both of which are patented and used only by the DE LAVAL Company, has in thousands of tests proven far superior to any other style of bowl construction. Other manufacturers have tried to imitate the DE LAVAL bowl but have never anywhere near equalled its efficiency. That is why over 98 per cent. of the world's creameries today use nothing but DE LAVAL machines. Creamerymen know that the DE LAVAL bowl is the only one which will secure all the milk profits. This fact should mean much to every dairy farmer who intends buying a separator. A DE LAVAL catalogue which explains separator bowl construction in detail is sent free on request. Write today.

THE DE LAVAL SEPARATOR CO.
NEW ENGLAND AGENTS: STODDARD MFG CO. RUTLAND, VT.
GENERAL OFFICES: 74 CORTLANDT ST., NEW YORK.

WATER SUPPLY
A whirl of standard make, one that's sure to be satisfactory, will cost you less than the other kind. Our **Steel and Wooden Wind Mills** are world famous. Celebrate Fairbanks' power. Water pumping with wind or other power is our specialty. Will attend to the whole job from start to finish and be responsible to you for results.
Full Line of Windmill Service Appliances
Including: Gasoline Engines, Pumps, Tanks, Pipes, Tank and Windmill Towers, etc. Competent specialists always ready to go out and make estimates when requested. Catalog free. Write for it.
Office, 312 Franklin St., Boston, Mass.
Providence, R. I. Office, 25 Canal Street.

Produce Notes.
The sweet corn business is quite a Barnardston industry, and this year the farmers have shipped 125 tons. It goes to a canning establishment at Brattleboro, which sends its product mostly abroad. Last year 120 tons were raised. A. B. Warner is the largest grower, and has about twenty acres of it. It is claimed that it will yield \$35 to \$40 an acre. The price paid is \$12 to \$14 a ton. Barnardston soil is not of the very best grade being rather gravelly, but there are good farms. Corn and hay are the biggest crops. Many farmers send milk to the Boston market.
Cranberries are very plenty, and dealers expect the supply will continue fully equal to the demand. Prices this week are a shade weaker.
Cabbages are in steady demand with prices firm.

To improve dairy profits, begin the reform right away. Better cows, better rations, regular feeding, warm but sufficiently airy stables, good water, clean, careful and gentle treatment, all these are steps which, taken together, go far to bridge over the difference between loss and profit. In fact, the farmer who has the gumption to make such improvements may safely be trusted to conduct the details and the soiling part of the business in an effective manner.

Dr. L. T. Leach of Indianapolis, Ind., reports the discovery of Cancerol, which readily cures all forms of cancer and tumor. It has cured many very bad cases without pain or disfigurement. His new books with full report sent free to the afflicted.

The surplus plants are weeds while above ground, but are so much fertilizer when turned under with a plow or hoe.

Official List of Fairs.
State and General.

West 4th Street	Nov. 1-3
New Hampshire Grange Ass'n Mtg.	Nov. 1-3
North Carolina, Raleigh	Oct. 15-20
Texas, Dallas	Oct. 15-20

MASSACHUSETTS.
Massachusetts Horticultural, Boston, Sept. 1, 4-5 Oct. 16-17

MAINE.
Proportional Fair Association, Portland, Dec. 17-18
Maine State Fair Ass'n, Portland, Dec. 17-18
Bangladesh, Banglad, Oct. 1-11

NEW HAMPSHIRE.
N. H. Grange Ass'n, Manchester, Jan. 1-17, 1917
New Haven, New Haven, Nov. 6-8

CANADA.
F. A. Island, Charlottetown, Oct. 6-12
Yarmouth, Yarmouth, Oct. 10-11

FEED MOLASSES
EXTRA FINE MOLASSES keeps the stock in a healthy condition. It helps assimilate other feeds, and cow digestion. It produces a glossy coat. It will eradicate worms. It increases the flow of milk and makes richer milk. Ask your grocer or grain dealer for EXTRA FINE, or send for information and valuable book on the discovery and use of molasses as applied to stock.
BE SURE TO SEE THE TRADE MARK.

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Eight years' experience in many American and foreign stock and pedigree sales. Terms reasonable. Write or visit for dates.

SAM W. KIDD, LIVE STOCK AUCTIONEER, LEXINGTON, KY.
FIVE YEARS' successful selling for leading breeders of pedigree stock and stood the test.

SHORT-HORNS FOR SALE.
SCOTCH-TOPPED BULLS, COWS AND STEERS. COWS AND HEIFERS BREED TO IMPROVED BULL.
ALBERT A. RAWLINS, Springfield, Ohio.

Huntlywood Southdowns
No. 223, A. DUNHAM, Proprietor.
BREMEN FLOCK OF 300 HEAD.
Selected from the best English Flocks.
Bred by Duke of Richmond, "Sandringham," and by King Edward VII., "Union Jack," and "Brimstone Colours," bred by G. W. Adams.
A. D. W. H. GIBSON, Esq., Quebec, Canada.
REPRODUCED BY P. C. O. Quebec, Canada.

ABSORBINE
Removes Pimples, Enlargements, Pains, and any kind of swelling. Cures Lamebacks, Ailments, Pain, Rheumatism, and any kind of swelling. Blister, stain or remove the hair. \$2.00 a bottle, delivered. Pamphlet L-C free.
ABSORBINE, J. R., for mailing, \$1.00 bottle. Cures Rheumatism, Wounds, Sprains, Gouty or Rheumatic Joints, Swollen Varicose Veins, Varicose, Hydrocele, Ailments, Root Free. Genuine milk only by W. J. Young, P. O. Box 100, Monmouth, N. J. or by mail.

1840 Old 1906 Colony Nurseries
Hardy Shrubs, Trees, Vines Evergreens and Perennials
A large and fine stock of well-rooted plants, grown in sandy loam. Good plants, best for planting, very cheap. Priced catalogue free on application.
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We Manufacture All Kinds of Team and Farm Wagon Wheels
And furnish them, tired, banded and boxed, with Concord axles, welded and set. Write for particulars.
A. E. STEVENS & CO., Portland, Maine.

WOODLAND HEREFORDS.
Bred headed by the prize-winning Perfection 10 1888, son of the BURNING Dale and Dean Donald 1816. This herd consists of the most noted cattle of the breed. Such as Hilday May, the dam of the great Perfection Family; Columbia, a sister of the great Dale; Night 6th, dam of the great Miss Dale, highest priced Hereford cow ever sold at public auction in the world; the BURNING Dale, the highest priced 2-year-old of 1901; and others of similar pedigree. Bulls and heifers for sale by the above great sire at all times. J. C. ADAMS, Hereford, Ill.

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SCOTCH-TOPPED BULLS, COWS AND STEERS. COWS AND HEIFERS BREED TO IMPROVED BULL.
ALBERT A. RAWLINS, Springfield, Ohio.

HOWING THE PRESIDENT'S LAWN.

Automobile lawn mower used on White House grounds at Washington.

using his not entirely obdurate heart, and in wedding his son, who is entirely opposed to his father's business methods. Some people have associated the name of the elder Rockefeller with the multi-millionaire magnate in this book, but the resemblance between the two is only of a general character, and the heroine is not much like the magazine writer with whom she has been compared, except in the fact that she does portray the personality of a big figure in commercial life in periodical literature. The novel will apparently attract quite as much public interest as the dramatic presentation of the power of our multi-millionaires in advancing their own interests and adding to their colossal gains. (New York: G. W. Dillingham Company. Price, \$1.50.)

THE MAN AND THE MASTER.

In this little volume we have the essence of a series of sermons preached on the general subject contained in the title. The author is the Rev. James R. Freeman, pastor of St. Andrew's Memorial Church, Yonkers, N. Y. Mr. Freeman believes that the more completely we bring Christ within the range of our own experience, the more fully do we grasp the rich significance of His perfect character, and the more really do we touch, in a sympathetic way, the goodness and power of His forgiveness. He therefore devotes a chapter each to Jesus Christ as a boy, as a workman, as a teacher, as a reformer, as a friend, as a liberator, and as a Savior, showing that He is near to the everyday life of mankind, and has none of the remoteness that too many

continued for the time being. The following year a suitable building was secured and the reopening of the hospital followed. In 1871 it was incorporated by Isaac Livermore, Samuel E. Mason, W. W. Wellington, Kinsey Twining, Benjamin Tilton, Alexander McKenna, Henry F. Walcott and other prominent citizens of Cambridge, but in 1872 the money for sustaining the hospital not being forthcoming, it was again discontinued.

In 1881, however, it was apparent that some determined effort should be made to provide a hospital for those who needed the care and attention which it could afford, and the re-establishment of the hospital was the result of the successful effort to raise funds for its immediate support.

The first large benefactor was Isaac Fay, who bequeathed to the hospital \$10,000 to be used as a building fund. In December, 1881, the ladies of Cambridge held a fair, the proceeds of which were given to the hospital, which also received several generous gifts from various philanthropic people. In 1883 the lot of land on Mt. Auburn street, opposite Channing street, where the hospital stands, was purchased, and the buildings were open and ready for the reception of patients on May 1, 1884. Important additions have been made from time to time on the needs of the institution demanded. First, to provide a building for the care of patients suffering with communicable diseases, then a building for the nurses, and finally a building to be used for surgical operations, which in the adapt-

free bed may be obtained by request from the contributor thereof.

The number of patients applying for admission to the hospital is constantly increasing, and therefore the institution should have larger invested funds, or more liberal annual donations, in order to carry out its charitable mission for the direct relief of the sick and suffering, and to increase its facilities for the reception and treatment of patients. Those who are sociably off and those possessed of more than ordinary riches, should bear this in mind, and lend to the Lord by donating as liberally as circumstances will allow to the yearly increasing necessities of the hospital. Its usefulness cannot be extended unless the philanthropic comes to its aid at once.

Elizabeth B. Maxwell of Milton, Mass., has bequeathed to the Milton Town Library all her books and an oil painting of Captain George Mayfield. The latter, however, will go to the Massachusetts Historical Society in the event of the trustees not caring for the portrait. When the private bequests have been entered the remainder of the estate will be distributed equally among the following named beneficiaries: First, Congregational parish or society in Milton; Second, the Cambridge Society; Third, the Baptist Church, Boston; Fourth, the Baptist Church, Boston; Fifth, the Baptist Church, Boston; Sixth, the Baptist Church, Boston; Seventh, the Baptist Church, Boston; Eighth, the Baptist Church, Boston; Ninth, the Baptist Church, Boston; Tenth, the Baptist Church, Boston.

Poultry.

Turkeys in Fall and Winter.

As soon as the weather begins to turn cold, and insect food becomes scarce, an increased grain diet must be provided for the growing turkeys. A ration of wheat and corn is best. Do not feed them too much at first, but gradually increase the supply until they are having all they can eat.

THOSE WHO SUCCEED BEST

In having the turkeys ready and in fine condition for the early market are those who know them freedom, and feed them all they will eat of wholesome fattening grain, when fattening them it is not well to confine them. If they are fed each day at regular hours, and at the same place, it will be an easy matter to have them come three times a day to this place to be fed. Their longing for food being fully supplied, the violent exercise will be taken, and the energy that would be expended in their wanderings in search of food will be directed in the more profitable channel of growing and developing for market. Turkeys that are poorly fed during the fall extend in seeking for food that is no longer obtainable considerable of the flesh they have gained.

WHEN FEEDING TURKEYS FOR MARKET must be remembered that they will sell considerably more per pound than can be obtained for hogs or cattle, while the actual food cost per pound of turkey meat is but little, if any, more than for hogs or cattle. It will always pay well to give to growing turkeys all the grain they can eat. Keep them growing from start to finish, and have them ready for the Thanksgiving market, when prices are usually the best. This may be accomplished quite easily with all the early broods, provided they are properly and liberally fed as the fall weather begins to remove their natural food supply of worms, bugs, seeds and the end most desired in complete growth and the greatest possible weight by Thanksgiving time. The records of years show the highest value for market turkeys to have been reached during the last week of November. While the demand is not quite so brisk at Christmas time, the prices are almost as high.

OLD CORN IS BETTER THAN NEW for heavy feeding, as the latter is apt to cause looseness of the bowels. If necessary to use new corn, it should be introduced into the ration gradually. If the turkeys have gained a strong, well-developed physique by early fall, they will be in fine condition for heavy feeding. As soon as they have become accustomed to grain feeding, they may be fed once or even twice a day on ground oats and corn meal mixed with milk. This should be given in addition to an abundance of wheat and corn. They should be fed each time just what they will eat up clean with a relish. Feed the grain mornings and evenings, and the mixture at noon or twice between morning and evening as best suits your convenience. See that plenty of sharp grit is always at hand for their use, and provide a constant supply of fresh water where they may help themselves.

SPECIAL FOODS.

Some who grow turkeys for a fancy market feed them obstinate and celery seed during the last few weeks of fattening. These are rather expensive articles of food and can only be used by those who sell their product for almost double the average market price. Such feeding imparts a pleasant flavor that adds value to the turkeys which are finished in this way, and these feed ready sale at the highest prices for the tables of those with whom cost is a minor consideration. Where the scale of prices is regulated solely by quality, the finest grades will sell from nine to twelve cents per pound higher than will the lower grades. To grow the best is quite as easy and but little more expensive than to grow the poorer grades, and the profit gained is almost double.

Coarse Feeder for Poultry.

Makes practice of sorting your vegetables, storing by themselves for the winter use of your flock all those which are not readily salable or needed by the family. Indeed, it is an excellent plan, if your garden space will warrant it, to plant with this in mind.

Cabbage is easily grown and affords a bulky and easily digested food which they will greatly relish and which will do much to keep them in health. A supply of turnips, carrots, beets, potatoes, winter squashes, pumpkins, rutabagas, mangels, winter radishes, etc., will also be found desirable for use in the long cold weeks of winter. Some of these vegetables may not have great feeding value nor merit as egg producers; but they are liked by the fowls, supply bulk to the ration, aid in giving variety to the food, and in a measure supply some of the summer conditions which are supposed to be indispensable to winter egg production.

If you have any clover growing upon your grounds, whether pure or mixed with other grasses, cut, cure and store it; for your feathered friends will welcome an occasional armful during the winter. They will pick it through and through, and the portion they discard will add to the litter necessary for the floor of their scratching shed.

The expense of litter, for you may not be farming on so large a scale as to produce your own straw, may be materially lessened in many ways. If a grove or bladed woods is near your farm, fall leaves can be gathered in one autumn day to last all winter, and they serve the purpose excellently. The grass and weeds of the roadside, fence rows and other waste places of ground may be cut, cured and made to do good service in this capacity. Madame Biddy will pick it over repeatedly and will find many a seed, leaf and blade exactly to her liking. Save the straw from the bean field for the same purpose. Should you chance to raise your own corn do not hawk it in the field, but make the ears and husk them in the scratching shed as you feed it in the winter. The husks make an ideal litter, as they are light and springy and do not readily gather dampness. The thick covering of them that gradually accumulates on the floor of the scratching shed will be warm for the feet of the hens, while it is readily thrown from side to side when they are busily searching for the grain beneath. The husks grow well and will remain fairly dry and clean until literally "worn to shreds." Break the ears of corn in places and strew them around in the litter. The hens will shell their own corn and will get good exercise out of it, instead of filling up and satisfying their hunger in a few minutes and then moping in idleness the balance of the day.

Buckwheat straw, while of little use or value for other purposes, can be made of some account in the scratching shed, though

we would prefer to make use of corn husks or leaves if they were equally available. Make the garden and the poultry yard work for each other. If there is an unoccupied spot of ground in the former that is big enough for a cabbage to grow in, make it pay for its keep. Feed your poultry whatever is edible that cannot be consumed by the family or sold, and so that all waste and litter from the garden and poultry house, scratching sheds and yards ultimately find its way to the compost pile, thence, when well rotted, back to the garden to be turned into fertility and profit.

These are small and homely economies; but it is even as these when profited by the gardener and poultryman that helps to keep the balance on the right side of the book at the end of the year. H. M. F.

Borticultural.

Horticultural Notes.

Among the lists of apples in the American Fruit Book, published in 1914, we find the Alexander, Baldwin, Dabney, Early Harvest, Fall Pippin, Gloria Mundt, Graywax, Hubbardston Nonsuch, Johnathan, King, Maiden's Blush, Newtown Pippin, Northern Spy, Peck's Pleasant, Porter, Red Astrachan, Ribston Pippin, Roxbury Russet, Golden Russet, Fameuse, Sweet Bough, Twenty Ounce, Williams, Rhode Island Greening, Danvers Winter Sweet, Tallman's Sweeting, Winesap and Yellow Bellflower, and nearly 150 others, which are seldom seen in our markets now, or even in private gardens, unless it be where some one tries to grow a large variety without much regard to value. But what have we to add to that list of really prime apples during more than a half century? The Sutton's Beauty, the Ben Davis and the Gano, the two last named having a better reputation for selling in foreign markets than for use at home. Have we reached the limit of our powers in developing good seedling apples, or have fruit growers decided that they cannot improve on what we now have?

Hon. J. H. Hale, the well-known peach grower, says that in Boston twice as much fine fruit can be sold in a day as in Philadelphia, and at twenty to forty per cent. better prices, although the population of the two cities numbers about the same. He attributes this in part to the greater pains taken by our fruit dealers to make their stands attractive, and in part to the fact that Boston people are educated to know what is really good fruit.

The Fall Flowering Cereus.

These are rather new and hardly known in this country. They are undoubtedly one of the most valuable classes of flowers now in existence. Naturalizing flowers in the lawn or border has become very popular, but up to this time only such varieties have been planted as will flower in spring and early summer.

To cover the balance of the season, particularly the late fall, when other flowers have disappeared, the fall cereus is a mighty welcome visitor. The advantage of this bulb is that they derive results immediately or soon after. These bulbs should be planted in August or early September, and if that is done, results may be expected within a few weeks.

Another advantage is that their flowering season lasts fully six weeks. They are absolutely hardy and will increase with the year. The foliage of these flowers appears in the spring and is very decorative. If in the lawn they may be cut down with the grass without doing any injury to the bulbs. As some of the varieties are quite inexpensive, they should be planted in large groups or masses.—W. W. Rawson, Boston, Mass.

Popular Science.

Electric-light treatment of disease is reported by Russian physicians to be effecting many cures where ordinary remedies fail. Dr. Manting uses lights of fifty, thirty-two and twenty-five candle power, testing both blue and white bulbs, and gives exposures at distances of eighteen inches and less for fifteen to forty-five minutes at a time. The patient is sometimes treated daily, sometimes every third day. The electric light alone often cures, but supplementary aid is called upon at times.—in skin disease, for example, a fluorescent paint of a five-per-cent solution of rosin or fusin being applied. Success seems to have been especially marked in hysteria, neuritis, rheumatism, and skin affections. One physician mentions that the light invariably proves a magnificent tonic, invaluable in insomnia and general debility, and it has had effect in checking hemorrhage from wounds and even in tuberculous disease.

In colonial farming, Fara boasts of a curious but rapidly passing survival of prehistoric industry. The cochineal, first recognized as an insect by the microscope of Leuwenhoek in 1705, thrives in tropical America, where it seems to have been cultivated for centuries before Cortez conquered Mexico. Since attracting the attention of King Ferdinand in 1519 it has been famed as one of the finest dyes. It is still unequalled for brilliant and permanent coloring, but it is being displaced by coal tar products, and the demand has been dropping in recent years, though the Peruvian yield still amounts to several million dollars annually. The insect is exceedingly minute, the living female twice as large as the male—weighing only one-twentieth of a grain, while several thousand of the dried bodies are required to make a pound. The females outnumber the males two hundred to one, the latter being quite useless for coloring. The insects appear rather mysteriously after the rainy portion of the year, and soon cover the maple plant, a kind of cactus, living only a few days at most, and possibly only a few hours, but multiplying so rapidly that three acres are gathered in the dry season of seven months.

The industrial prospects of a nation are regarded by Professor Lippman, late president of the French Association for the Advancement of Science, as largely dependent upon its scientific research and the employment of the mathematicians, the chemist and the physicist. Germany is leading the world's post-war development of science, and one large scientific laboratory has its scientific apparatus and its technicians. As these companies pay dividends of twenty to thirty per cent, there is evidently some method in their organic method.

A flash of lightning one thousand long and lasting one-thirtieth of a second produces energy, estimated by Otto M. H. to be worth \$100 at the price for electric lighting in Berlin. This energy corresponds to the industrial production of electricity in all Germany during the year 1915, and the cost of the lightning flash is only one-thirtieth of the cost of the electricity. The lightning flash is a natural phenomenon, and it is not possible to harness it and use it as a source of power. The lightning flash is a natural phenomenon, and it is not possible to harness it and use it as a source of power.

in water. The trials indicate that for very sharp boats this method is superior to any other. The effect varies with the thickness of the man to be hauled, and increases with the velocity of the air and the rapidity of the stream. —The chemical principle of our food must remain a dream for the present, we are told by Prof. T. S. Brown, of the University of Illinois. The ideal of a perfect food, one that would contain all the elements of life and be as easy to digest as a loaf of bread, is still a dream. The ideal of a perfect food, one that would contain all the elements of life and be as easy to digest as a loaf of bread, is still a dream.



PRIZE GOLDEN WYANDOTTE PULLEY.

so that other spokes—all being alike—are seen just behind the places first occupied.

A new speed indicator for trains is a German suggestion. A dynamo driven by the axle of the locomotive would show an increase in voltage corresponding to the number of revolutions, and a voltmeter with two dials could be made to indicate both the potential of the dynamo and the corresponding rate per hour of the locomotive. An attachment could be added to give a continuous record of the speed.

Historical.

Spelling reformers should bear in mind the history of the alphabet, which shows how, even in the days of dictionaries, word fashions change. In the eighteenth century, even in elegant usage, the diphthong was regularly called "sparrow grass." A dictionary of 1781 says that "sparrow grass" is now so general that "sparrow" has an air of stiffness and pedantry. "Sparrow" had been the usual English form in the sixteenth century, but in the seventeenth century it had been replaced by the original Greek and Latin spelling "asparagus." Foye varies be-

cause the "leg cabin candidate" and through the doorway of the picture cabin, near which he sat, could be seen the barrel of rifle, once again and strings of back eyes decorating the walls.

The Sauterier.

The tipping system has become so universal that the Sauterier almost expects to tip the man from whom he buys a suit of clothes. And why should he not? His bootmaker, who advertises "Shine, five cents," always expects an extra nickel cent. After he has finished his job, and the man who shaves you in the barber shop, and his colored brother who rubs a broombrush up and down your back without removing any dust, both expect tips. It is a wonder that the milkman does not ring you up and ask you for five cents for leaving your can of the latest fluid. In a Turkish bath establishment which the Sauterier patronized in a neighboring city, he was surprised that it cost him about two dollars before he got through, though the price set down was one dollar for the vigorous cleaning.

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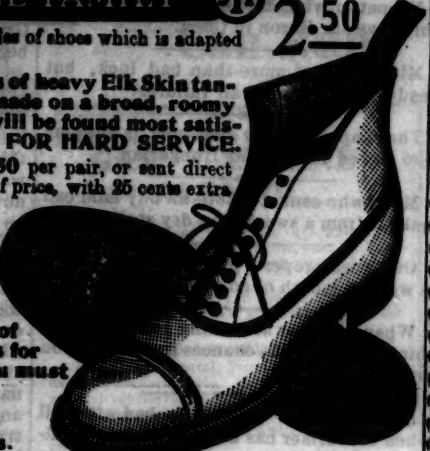
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revealed. Like most mysteries, however, it is to be presumed that it will be unraveled by time.

The Sauterier, in riding into town early the other morning on a surface car of the I. road, saw a man take a big roll of bills from his pocket and tender a ten dollar note in payment of a five cent fare. The conductor was a little embarrassed by this, but after consulting among the other passengers, he managed to get the bill broken. But why do not those who ride on the street cars carry small change with them? They could easily do so if they were not thoughtless. But the Sauterier has heard of a man who always presents a large bill in paying his fare, with the hope that the conductor will charge himself with a nickel. He, however, was not so lucky as the man who offered a check on a bank to the conductor, and was very indignant when he was told he might get off at the next white spot.

Suit cases are, no doubt, a necessary evil, but when a couple of them are deposited in the space between two seats of a car and a lame man has to climb over them, they sometimes excite the delivery of a big, big D. People who carry suit cases should distribute themselves about a vehicle so that their impedimenta may come like angels' visits, few and far between. The old carpet bag was not ornamental, but it did not back the shins.

The Sauterier wonders if the old-style bonnets will ever come into fashion again. Who does not remember Nora Perry's poem beginning:

"Tying her bonnet under her chin she tied a young man's heart therein."

There are no strings to feminine heads nowadays, but pins galore, which are always making the girls exclaim, "Is my hat on straight?"

The Sauterier is acquainted with a young woman who always carries to the theatre a hand mirror, which she makes her escort hold while she is putting on her hat after a performance. It's a wonder he does not drop it on the floor, for he is an object of general attention to the out-going audience. Many persons are already beginning to look about for articles for Christmas presents, and those who received gifts last year that they did not like are polishing them up to send to their acquaintances they do not highly regard, but whom they do not want to slight openly. This, of course, leads up to the practice of that economy which is wealth, even if the sender gets a false reputation for being generous.

Makes the Home Work.

Physical culture has been extended to include chickens, hens and other fowls by a recent invention of a Pennsylvania man. As man undoubtedly benefits by exercise, it follows that fowls should do likewise. This device is so constructed that the fowl, in order to secure food, is compelled to undergo increased exercise, as compared with the ordinary manner of feeding.

To carry the plan into effect, a circular plate about two feet in diameter is made to revolve on a wooden support, the circular plate being at an angle from the ground. Adjacent to the edge of the plate is a feeding bowl, open only at the side next to the plate. Fowls desiring food step upon the platform, causing it to revolve under their weight. The result is that they are compelled to move rapidly forward to maintain a position on the platform which will enable them to reach the food in the bowl. The framework supporting the circular plate can be adjusted to accommodate fowls of different weight.

Among the Farmers.

The simplest plan for deboning calves is to find it to take powdered lye and mix it into paste with turpentine. It must be used when the calf is two weeks old, not later, and applied carefully to the hump on the calf's head which indicates where the horns will be.—J. Morris Wood.

I believe you are doing your brother farmers a good service in telling them how to grow a crop of alfalfa, for I certainly believe there is an opportunity in this Eastern country to use some of the poorer lands that haven't heretofore been of any service to our fellowmen.—George M. Clark, Higgins, N. H.

A good plan in the farm garden is to plant small onion between the onion rows. The onion will be out of the way by the time the onions need the room.—Frank G. Duffin, Vermilion County, Ill.

James O'Leary of Waynesboro, Va., is now engaged in putting in a new plant for the production of cider and vinegar. The plant will have the capacity of three thousand barrels per annum. The plant will not be ready for this year's crop, but the old plant having a capacity of one thousand barrels will be used. His orchard of one hundred acres contains 1500 trees ranging from three to nineteen years of age. It requires much labor to care for an orchard of this size according to modern methods. He now employs twelve hands and at times has thirty-five to forty. His orchard is not bearing this year, and as the general crop is large he is very well satisfied for this to be an off year.

Professor Shaw says, when building a head of corn: (1) Select some of the form desired wherever they can be conveniently got, and without much regard to their breeding. (2) Then fix up the pure breed which it may be desired to select males from, choose good individual strains, and continue to choose them from the same; and (3) use it to fix the seed to adapt to the needs of the animal. The idea applies to farm animals in general.

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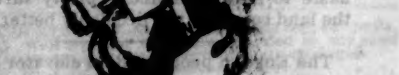
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Our Domes.

The Workmen.

A KNITTED SWEATER.
For this sweater 1 pound of German knitting yarn, 1 skein knitting silk, and ribbon for fancy fronts; 1 pair bone or rubber needles No. 4, and 1 pair steel needles No. 10. The sweater is 36 bust measure, and the pattern is made as follows:
1st row—(*) 3 plain, purl 2, 1 plain, purl 1, repeat from (*) across.
2d row—(*) 3 plain, purl 2, and for the next 6 stitches knit plain where the stitch in the first row was purl, and purl when the stitch was knitted, repeat from (*) all across row.
BACK.
Cast on 72 stitches on the steel needles, and make the first 4 rows 2 plain, purl 2, change to the larger needles a 4 begin pattern, knitting 9 inches, or to under arm. Bind off 1 stitch each end of needle every other row, until it has been taken off, and then knit the pattern until the back is 14 inches long.
Knit 22 stitches for each shoulder, binding off the intervening ones for the neck. Slip the first 22 stitches on an extra needle, and continue working on the left side, making the shoulder two inches long. Then add 2 stitches at a time every time the neck end of the needle is reached until there are 38 stitches on the needle. Knit pattern for five inches and then add 16 stitches for under-arm. Knit seven inches more and then begin the blouse portion. Leave the first 30 stitches at under-arm end of needle, knit to front, turn and knit back to within 40 stitches from end of needle. Knit back to front edge, turn, and on knitting back again leave 10 stitches with each knitting. Continue in this way, leaving 10 stitches each row until all are knit off. Then knit 1 row plain, 1 row narrowing until there are only 6, and then change to steel needles and knit 4 rows of 3 plain, purl 2 like back. Knit second row like first.

SLEEVE.
Begin with 36 stitches; add 2 each end of needle for 4 rows, then 4 each end every fourth row until there are 120 stitches. Knit three inches and then narrow every third row until there are 100 stitches. Continue knitting until the seam is 14 inches long on inside edge; then change to steel needles and knit 2 plain rows narrowing to 64 stitches, and begin cuff; 2 plain, purl 2 for 3 rows, then put in silk and knit across and back, and continue alternating the silk and wool until there are 12 stripes of wool and 11 of silk.
NECK.
Cast 18 stitches on steel needles.
1st row—One plain, purl 1, alternately, all across.
2d row—Purl 1, 1 plain, repeat all across.
Knit until belt is 25 inches long and finish with 1 row of single crochet silk.
COLLAR.
Cast 125 stitches on steel needles. Knit same as belt. Make first 4 rows of wool, then 4 rows of silk, then 2 inches with wool. Then begin to decrease in order to shape collar. Leave 15 stitches at each end and, on the next 3 rows leave 10 stitches each end, 5 stitches each end on each of the next 2 rows and then 2 stitches on each of the succeeding rows until the centre is reached. Then knit across once plain and bind off. Finish collar with one row of single crochet silk and sew in place, leaving 4 inches each end for fullness.
Sew up seams in sweater and sleeves and sew latter in place. Cover buttonholes with white silk and then with a needle threaded with knitting silk. Make silk loops.
EVA M. NILES.

How to Care for a Piano.
A piano should be tuned at regular intervals, preferably after the beginning of each season. It becomes out of tune as much by change of temperature as by use. Too much stress cannot be placed upon the selection of a tuner, as an incompetent tuner can do great damage, and will usually magnify a slight trouble in order to justify a high price. It is best never to engage an unknown tuner, or if he is engaged be careful to examine his references and be satisfied that he is reliable and experienced. The jingling or singing sound at times noticeable when the piano is played frequently is due to what is called "sympathetic vibration." This is produced by an ordinary article in the room vibrating in sympathy with some particular tone in the piano. To ascertain the cause of this vibration, the key which seems to produce the difficulty should be struck by one person and another should go about the room listening carefully, and the article which vibrates can be discovered and the cause removed. Any hard substance, no matter how small, when dropped inside of a piano will cause a rattle or jarring noise.
If a pedal should squeak remove the bottom panel of the piano and apply a little black lead, powdered from a pencil, at the part where friction exists. Cleaning the case may be accomplished by wetting a piece of cotton flannel and dropping upon it a few drops of ordinary olive oil. Rub a small portion of the piano at a time, wiping it off thoroughly with a dry piece of cotton flannel. Afterward rub with a soft, clean cambric skin or another piece of clean cotton flannel, always taking care to rub with the grain of the wood, and occasionally to breathe on it in order to remove every particle of oily substance.—N. Y. Mail.

Monticuring.
A branch of beauty culture that has reached a stage of perfection is that of manicuring. So essential is the professional manicurist considered that it is hard to realize that only a few years ago there was not one, and that the most fastidious persons were content if their nails were simply cut and clean without regard to any attempt at beautifying them, says the N. Y. Sun.
Nowadays lady's finger tips are exquisitely kept, and the owner, no matter what her walk in life may be, is not forgiven if her hands are hard and unpleasant to the touch.
The woman who can make tri-weekly visits to the manicurist is lucky. That luxury is not in reach of all, but very satisfactory results may be had by treatment at home, with an occasional visit to a manicurist.
The first step is to soak the fingers in warm water and soap for ten minutes. The fingers should be soaked ten minutes, and then the nails are in good condition to commence operations. With a blunt instrument that will not wound the flesh, the skin around the base of the nail should be pressed back, and this should also be done after each time of washing. In this way the half-moon which are the beauty marks of the hands will be caused into view, for though they may be deeply hidden, they are sure to make their appearance if you

HOME OF A PROSPEROUS FRUIT GROWER.
In many parts of the Lake region of Western New York, notably Niagara, Monroe and Orleans, are found well-kept farmsteads such as is illustrated by the home of W. T. Mann of Barker, N. Y., and many others in the fruit-growing belt. Nowhere would the traveler find more comfortable homes, better decorated lawns, accompanied by a general appearance of thrift and prosperity, than in the region of Lake Ontario where apple is "king," and where other northern orchard fruits thrive when given reasonable care.

are persistent. No hand can be beautiful without them, and on many they are present quite naturally.

Always remember that scissors and the outside of your finger nails are deadly enemies. Not even for serving the lifeless skin that clings to the nails should they be used unless it is absolutely necessary. Immediately after the nails have been freed from all superfluous skin is the moment for shaping the nails. This is done with a file, and the sensible woman will follow the middle course as to the style of cutting, for Dame Fashion has her decrees in this matter. A little while ago it was decreed that the fashionable woman's nails must be very long and pointed, and if the object was to prove that the hands were stronger to work, it was certainly accomplished; but this extreme fashion excluded piano playing and other aristocratic amusements as effectively as it did manual work, and few adhered to it rigidly.

The nicest shape for the nail is oval or slightly pointed, and the almond-shaped nail is indicative of good birth. If the nail is flat it is probable that the fingers are not tapering, and much can be done by manipulation to remedy that defect. After filing the nails to the proper shape, a tiny emery board should be used to smooth the rough edges, and if scissors must be called upon to remove any hard, dead skin, or what is known as "hang-nails," these should be the curved corners of fine steel that are sold especially for the purpose and that do not injure the fingers.

In order to keep the skin at the base of the nail from growing rapidly, a few drops of acid should be put on it, and whenever one thinks of it the skin should be pressed back with the thumb nail until it becomes the required shape. This gentle persuasion if frequently applied will do wonders for the looks of the nails.

To polish the nails a good cream, probably of rose tint, is first rubbed in. In some rare cases the nails are so pink naturally that the white cream is preferable for this purpose. Let the cream remain a few seconds to be absorbed, and then with an old polisher covered with nail powder polish till the surface shines satisfactorily. After this, dip the fingers again in the warm water to rinse off the cream and powder. It will not destroy the polish, but it will momentarily requiring only a second vigorous rub with a clean buffer on the nail, and the palm of the hand, which cannot be improved upon as a buffer. There are several liquid preparations for putting a gloss on the nails, but few can be recommended, for they close the breathing apparatus of the nails, and that is in all cases disastrous.

If a person is in bad health the condition is apt to make itself evident through the nails. Small ridges appear when symptoms of gout are present, and liver complaints are shown by the little white spots that children are welcomed as "friends, foes, presents, beauty," etc. These little spots, however, are not always an indication of ill-health, as they may be caused by striking the nail, or by accidentally bruising it at the base before it has grown out.
Occasionally there is a tendency toward ingrowing nails on the hands as well as on the feet, a condition that is most painful. The treatment is to cut the nail V-shape, and when it has drawn away from the skin in order to resume the shape, the skin can be treated to prevent a return of the trouble.

Baby's Traveling Hammock.
When traveling with a baby in a sleeping car insure a good night's rest for yourself and the baby, not to mention your fellow travelers, by putting him to sleep in the little hammock which is to be found in the berth. This procedure is practically for all infants under one year of age and is the only absolutely safe sleeping place for the baby. Provide yourself in advance with a piece of cotton rope two feet in length; with this one end of the hammock is to be made fast to the lower end of the chain or cable by which the upper berth is suspended, the other end of the hammock is left on the hook from which it usually hangs. The hammock is then suspended diagonally across the berth; now put in two pillows and to end. These serve the double purpose of spreader and bedding. If the hammock is strong, tightly it will swing clear of the person sleeping below and the rougher the road the more the hammock swings and the sounder the baby sleeps.—Good Housekeeping.

Effects of Water Drinking.
For the past few years physicians have been strenuously urging the necessity of drinking water. Optimum drinking is required by the system, not only to maintain the food, but to flush the stomach, bowels and kidneys, in order that they may be better able to perform their work.
Men and women in every community have been experimenting along these lines, and are proving the wisdom and efficacy of this daily internal bath. There must be method, however, in this frequent drinking of water, for water, or harm instead of good will follow.

To cut a healthy meal of even the most wholesome kind of food and immediately wash it all down with a glass of ice water is a foolhardy proceeding. Moderately cold or even hot water, or, in fact, liquid of any kind, cannot be taken with impunity into the stomach on top of a heavy meal.

Water, in order to have the most desirable effect, should be taken on an empty stomach, otherwise the gastric fluid will be so diluted that it cannot properly perform its functions. Half an hour, or an hour before breakfast, mid-way of meals, and on retiring are the most approved times. A quart or more during the day will serve to keep the system in good condition, and will keep the stomach, bowels and kidneys in good working order, provided these rules are rigidly adhered to.

Parents, however, while pursuing this course of treatment with themselves, often fail to instill the same mode of procedure into the minds of their children. Let them early be taught, both by precept and example, that there are stated times when water may healthfully be partaken of, and that there are also times when large draughts of water are very harmful. It cannot be too forcibly impressed upon the young mind that ice cold water should not be drunk, for, if indulged in, and that inordinate drinking of it when very much heated, or after a full meal, is extremely harmful, and may prove fatal.—Health.

House Plants.
When taking in your house plants in the fall remember to give them plenty of water, and do not allow the soil to harden. When water is put in saucers to be drawn up through the bottom of the pot, the plants get very little of it. The roots alone are not the only important part of the plant. The leaves need water and considerable attention, for dust clogs the pores and prevents the plant from getting moisture. Sprinkle the leaves and flowers every time you water the plants. In the case of plants with large leaves, it is well to wash them off lightly with a wet sponge. The water should not be cold, but about the same temperature as the room. It does not hurt the plants to give them a thorough soaking once in a while. It is much better than frequent wettings, with only a little water. Some authorities say plants should not be removed from the pots when placed in the room in the spring. If this is done it disturbs the roots when they are reported in the fall. If the house is heated by steam or furnace, it is necessary that water should be kept on the radiators to prevent the air becoming too dry. It is not well to keep plants in painted pots. The paint closes the pores of the clay and prevents the air from reaching the roots.

Muscle Aids Brains.
A physician who has given much attention to educational questions, combated the idea that a child's intellectual development weakens his physical powers.
"Recent experiments in the schools of this country," he said, "have shown that the child who is physically strong and healthy is a more capable student than one of inferior health, and that good food and development of muscle have a distinctly beneficial effect on the brain powers."
"It has been proved that many children are dull and backward, not from any mental defect, but because their physical powers are below par. Poor vitality, weak sight and other ailments were the real causes at the back of what, to the superficial observation, seemed to be inability and unwillingness to learn."

"For this reason parents should study first and foremost the physical well-being of their children. Many boys and girls would benefit far more by a course of gymnastics than by book studies, which could be entered upon with more advantage a year or two later when the child had acquired a foundation of health and strength."

The Science of Apple Eating.
Apple eating, especially before retiring, is very beneficial to health. Apples are very nutritious, for they contain a mass of vitamins, and they are also rich in vegetable. If eaten before retiring, the brain and liver are benefited; undigested food is produced; the odor of the mouth is destroyed; the superfluous acids of the stomach are neutralized; hemorrhoidal disturbances are prevented; secretion of the kidneys is accelerated; and the formation of stone is prevented. The eating of apples is also an excellent preventive of indigestion, and of certain forms of sleep troubles.—Health.

Good Housekeeping.
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from burning, then rub through a sieve. To every quart of the apple pulp add a cup of sugar, a teaspoonful of pepper, one each of cloves and nutmeg, two of cinnamon and two medium-sized onions grated. Mix all thoroughly, adding a tablespoonful of salt and a pint of best cider vinegar. Boil gently for an hour, and bottle while hot and seal.

CHOPPED VEAL.
Grind two pounds of lean veal in a meat chopper and season with a teaspoonful of salt, one-half level teaspoonful of pepper, one-half teaspoonful of onion juice and one tablespoonful of minced parsley. Form into small colored cakes and broil over a hot fire, and then serve with brown sauce. Fry in deep, hot fat for about eight minutes. Fry two at a time and be sure that the veal is cooked to the centre of the cake. If the cakes are shaped to a point at one end and they will resemble a chop. Garnish with parsley.

PEACH PUFFS.
Beat two eggs very light, add half a cupful of milk, a pinch of salt, one cupful of flour which has been sifted once heaping teaspoonful of baking powder and one tablespoonful of melted butter. If necessary, add a halfcup more flour. Butter small, deep cups, put in a spoonful of batter, slice of peaches and cover with the batter. Steam half an hour and serve with either hard or soft sauce.

GRAPE FRAPPE.
This is a nice dessert to serve at a luncheon as well as at a dinner. To one quart of the best grape juice add one lemon, and enough sugar to sweeten, unless the sugar has already been added with the juice; after it has been thoroughly cooled, freeze. When ready to serve place the frappe on a plate or put it into a punch bowl and cover with whipped cream. The plate or bowl may be decorated with bunches of grapes and their leaves.

Notes to Housekeepers.
It is useful to remember in cooking potatoes that after the water has been strained off the pot should be given three or four sharp jolts so as to toss the potatoes. This has the effect of making them white and fluffy.

Run the hands on a stick of celery after peeling onions, and the smell will be entirely removed.

Never wash combs, clean by brushing and putting a piece of cotton through the teeth.

Mid stains may be removed from leather shoes by rubbing them with slices of raw potato. When dry, polish in usual way.

For any one afflicted with consumption, butter, cooked, if plenty of fat can be digested, is one of the best ways of curing the disease in its early stage.

An ingenious trunk manufacturer in London has invented a series of trunk-skirt trunks, dress trunks, hat trunks, bodice trunks, boot box, etc., all of which are fitted with locks which are made of metal.

When the annual holiday to mountain and seashore begins—only one key to carry, only one key to lose, only one key to find! But better, yet, infinitely better even than this is the American trunk which doesn't have to be unpacked or repacked when you get out on what you want. There are drawers for hats, drawers for fancy waists and underwear, and still other drawers for the little necessities that mean so much in dress and comfort. Such a wardrobe trunk is a boon to the woman without a maid.

The habit of drinking water as soon as one rises in the morning as well as on going to bed at night is one that cannot be too strongly recommended. It cleanses the entire system and clears the blood by giving the food when it is swallowed a clear passage to travel through. When the blood is pure it is impossible for the skin to look badly.

It is a mistake, according to a veteran housekeeper, to have floors that are intended to be ornamental covered with anything but wax. To varnish or shellac a hardwood floor of any kind is a mistake that should not be permitted under any circumstances. Invariably, the heat of them wear away and blotchy after a while, and then they have to be scraped and bleached, an expensive business. Since it is not well to have floors varnished, at all, the wax should be used on a wax floor, as it will only roughen it without removing the dirt. Turpentine is the proper cleaning medium.

Tenpins that are made of metal, if unused for some time, will often give a nasty favor to the nose. This may be prevented by placing a piece of soap in the hole between the pins.

Professor Goodrich, in a meeting of the Academy of Science the other day, called attention to the fact that the eyes of the blind are very sensitive. He pointed out that the eyes of the blind are very sensitive, and that the eyes of the blind are very sensitive.

In washing cotton dresses the color may be lost by drawing three quarts of salt in four quarts of hot water. Let the material soak in the water until cold. In this way the color will not fade. These garments should be ironed on the wrong side; this will do much toward restoring their color. Use nothing that will impart a gloss, so that it is to be avoided. Another way to wash delicately colored fabrics and maintain in soft two quarts of white bran as how in salt water for cool, strain, and then use in place of soap. Wash as usual and rinse twice in cold water.

Salt and water used as a gargle will soothe the palate and throat. A pinch of salt on the tongue followed ten minutes afterwards by a drink of cold water, often cures a cold in the throat. Salt, however, should be used with care, and not too much should be used.

A few drops of good perfume dropped on small pieces of perfume tissue and put among clothes, keeps away odors.

"Old Friend Tools"

Every man feels a certain pleasure in the use of good tools. He knows that he can depend upon them to do their work and do it well. In time a man will become attached to a good tool as to an old friend, so in sympathy do they seem to become.

Keen Kutter Tools are the kind of tools that become old friends. They are the dependable, long-service kind. There is neither economy or satisfaction in using poor tools, they are brittle and break easily, or they are soft and require constant sharpening, and they finally have to be discarded long before good tools would be worn out.

There is economy and satisfaction in buying Keen Kutter Tools because every Keen Kutter Tool is the best that brains, money and skill can produce.

Keen Kutter Tools have been the standard of America for 35 years and were awarded the Grand Prize at the St. Louis Exposition, the only prize of the kind ever given to a complete line of tools. The name Keen Kutter covers a complete line of tools so that you may buy any kind of tool with assurance of absolute satisfaction.

When, for instance, you buy a bit sure to get one bearing the Keen Kutter name. Made in all leading patterns, highest quality of steel, finest finish and with long cutting life, insuring long life.

Some of the other kinds of Keen Kutter Tools are: Axes, Adzes, Hammers, Hatchets, Chisels, Screw Drivers, Auger Bits, Files, Planes, Draw Knives, Saw, Tool Cabinets, Saws, Hay Knives, Grass Hooks, Brush Hooks, Corn Knives, Eye Hooks, Trowels, Pruning Shears, Tinners' Snips, Scissors, Shears, Hair Clippers, Horse Shears, Razors, etc., and knives of all kinds.

If your dealer does not keep Keen Kutter Tools, write us and learn where to get them. Send for Tool Booklet.

KEEN KUTTER TOOLS COMPANY,
St. Louis, U. S. A. 355 Broadway, New York.

100-STANDARD DELAINE MERINO RAMS FOR SALE—100
Also ewes of any age desired. All sheep are registered. Empire State Delaine, bred from the best flocks in the country—large, well developed and great shearers. Come and see or write for prices.

R. S. STOLLEN, E. C. CLOVER, W. E. HUNT, Clarence, N. Y. Rural Free Delivery No. 1

FISH AND GAME LAWS OF MASSACHUSETTS 1906

FISH--When not to be taken. PENALTIES.

PIKE-FISH not to be in possession or transported between FEB. 1 and JUNE 1	\$50
BLAOK BASS not to be taken under eight inches	\$10
TROUT, LAKE TROUT & LAND-LOCKED SALMON between SEPT. 1 and APRIL 1	\$10-25
Except in the Counties of Franklin, Hampshire and Hampden, where close season is between JULY 15 and APRIL 15	\$10-25
AFTER MARCH 31, 1907, close season in ALL COUNTIES between AUG. 1 and APRIL 15	
TROUT less than six inches in length not to be taken	\$10
WILD TROUT not to be bought, sold, or offered for sale, for each fish	\$1
SALMON between AUG. 1 and MAY 1	\$10-50
SHOULDER (only with hook and hand line at any time) between MARCH 15 and JUNE 1	\$1
LOBSTERS, alive, not to be less than 10 1/2 inches in length—boiled 10 1/4 inches	\$5
LOBSTERS, mutilated	\$5
BEARING EGGS not to be taken at any season	\$10-100
NETS and TRAWLS not to be used in ponds	\$20-50
Not using line ten hooks to be used in ponds, under penalty of	\$20-50
EXPLOSIVES and POISONS not to be used in fishing waters	\$10

GAME--When not to be Killed. PENALTIES.

UNNATURALIZED FOREIGN-BORN CITIZENS MUST SECURE FROM TOWN OR CITY CLERK A LICENSE FOR HUNTING.	
PARTIDGE and WOODCOCK, except in Bristol County, between DEC. 1 and OCT. 1	\$20
In Bristol County, between DEC. 15 and NOV. 1	\$20
QUAIL, except in Bristol and Nantucket Counties, between DEC. 1 and NOV. 1	\$20
In Bristol County, between DEC. 15 and NOV. 1	\$20
In Nantucket County, between DEC. 15 and NOV. 1	\$20
In Nantucket County, taking, killing or possession prohibited until March 1, 1907	\$20
QUAIL KILLED IN MASSACHUSETTS not to be sold at any time after Jan. 1, 1907	\$20
QUAIL FROM OTHER STATES not to be sold from Jan. 1 to Nov. 1 after Jan. 1, 1907	\$20
BLACK DUCK, or TRAIL, between MARCH 1 and SEPT. 1	\$20
ALL OTHER KINDS OF DUCKS, between MAY 30 and SEPT. 1	\$20
FLOVER, SNIFE, RAIL and MARSH or BEACH BIRDS, between MARCH 1 and JULY 15	\$10
HARES and RABBITS, except in Bristol County, between MARCH 1 and OCT. 1	\$10
In Bristol County, between MARCH 1 and NOV. 1	\$10
GRAY SQUIRRELS, except in Bristol County, between MARCH 1 and OCT. 1	\$10
In Bristol County between DEC. 15 and NOV. 1	\$10
DEER are not to be killed at any time	\$100
Not to be chased with dogs	\$20-50
INSECTIVOROUS and SONG BIRDS are not to be killed, captured or held in possession at any time	\$10
TRAPPING, CHASING, HUNTING OF BIRDS AND ANIMALS Prohibited, except owner on his own land and may trap, BUT NOT NARR, hares and rabbits between Oct. 1 and Dec. 1	\$20
FERRIES USED ILLEGALLY to be Confiscated.	
MONGOLIAN, ENGLISH, and GOLDEN PHEASANTS are not to be killed or held in possession, except for propagation, for shooting quail.	\$20
WILD PIGEONS, UPLAND FLOVER, HERON, BITTERN, GULLS, (except herring gull and black-backed gull) and TERNS, are not to be killed at any time	\$10
HEATH HEN (plumaged green) and WOOD DUCK not to be killed at any time	\$10
SALE OF Prairie Chickens Prohibited after Jan. 1, 1907, during open season, for each bird	\$50-100
SALE OF Grouse, March and Beach Birds Prohibited, except during open season, for each bird	\$10
SALE OF DUCKS Prohibited, except during open season, after Jan. 1, 1907, each bird	\$20
SALE OF Partridge and Woodcock Prohibited at All Times	\$20
SHOOTING OR CARRYING GAME OUT OF THE STATE	\$20
HUNTING OF THE LORD'S DAY Prohibited	\$10-20

U. S. LAWS RELATING TO SHIPPING GAME.
All packages containing dead animals, birds, or parts thereof, shipped by interstate commerce, must be plainly marked with name and address of shipper and NATURE OF CONTENTS. Penalty on shipper, carrier and consignor, not over \$500. Penalty on consignee for transporting game killed in violation of laws of State in which killed \$500.

The laws of Massachusetts are not to be violated by a person who is not allowed to remain with the game and to transport it to any place. A person who is not allowed to remain with the game and to transport it to any place. A person who is not allowed to remain with the game and to transport it to any place.

CAT FOOD

The Horse.

The Clydesdales.

The representatives of this breed of Scotch draft horses are usually bay, brown, black or chestnut in color, with white markings. In conformation, the leading characteristics sought are the possession of weight with quality and action. While adherents of the breed recognize the value of weight, yet they always associate with it quality of structure with superior mechanical action, and in judging a class of horses of this breed these features should have equal prominence. The head in the typical Clydesdale, though sometimes out of proportion to the other parts, is usually possessed of intelligent features. To secure the action desired the shoulders must be sloping so as to permit a free and long stride in the walk and trot; the arm must necessarily be full muscled, legs stout and flat, with a fine feather springing from the edge. The pasterns, which have received much attention in the formation of this breed, should be decidedly sloping, the hoof head or top of the foot should be large, and no amount of fine feather or excellence of pastern should be allowed to overbalance the necessity of a good sized foot, correctly shaped, and of splendid working texture.

The back should be short, and though seemingly long from the extra style secured by high carriage of head, should never be weak, which is prevented by shortness in the back, and with an easy rising and full coupled loin running smoothly into a strong croup. The quarters should be well muscled, and the hind legs, in addition to having every evidence of quality, should be properly set, meaning thereby that they stand close, and within condition, correct proportion in relation to each other. In no case should style be allowed to supplant essential draft qualities, as it would be a fault of judgment to permit high carriage and flashy action to attain prominence over a deep middle, strong coupling, in association with properly set limbs, as the source of Clydesdale popularity is the degree to which they combine the many essentials of a draft horse with activity.

John A. Craig.

The Most Profitable Horse for the Farmer.

Very few farmers ever make a success of breeding and rearing trotting horses, that is, they never get the big money that such horses occasionally bring. It is the trainer or the man that develops them that makes the money, and most farmers have neither the time nor skill to train such horses. And, again, there is only one great many that brings the big price. If they haven't the speed, they sell comparatively cheap.

Then there is the coach or heavy harness horse that sells very well, providing he has quality with style and action. These horses will sell in pairs, and they must be well matched and nicely trained, accustomed to the sights and sounds of the city, such as steam cars, street cars, automobiles, etc., so that they are perfectly safe when hitched to the family carriage. On the farm they do not see such things, and therefore will not bring the big price until they are educated.

Taking all in all, I think the draft horse is the most profitable one for the farmer to raise. The term draft applies to horses weighing 1600 pounds or more, but a good many horses that are put on the market in working order, or in fair condition, weigh 1200 pounds, could be made to weigh 1600 pounds or more if properly fitted for market, so have them fat when they are ready to sell. The larger the horse, if he has quality, the more he will bring. Those weighing from 1300 pounds up to draft weight are called chunks and sell fairly well, but not with the draft class. So in breeding, we should select our best mares, of good weight and quality, having feet and legs, such as Mr. Martin has described to you, and breed them to a good horse.

When you find a horse that breeds well with your mares, use him right along as long as you get good colts, and you will have a lot of colts of the same disposition, conformation and color, so that you can match up teams, for it takes all three of these to make a perfectly matched team. You can sometimes put a three year old and a four year old, or a four and five, or a five and six year old together, and make them up better than a newly matched team always brings a little more money than if not matched, but the least defect in a matched team is color. After all, there is no bad color for a good horse.—David Imrie.

Silage for Horses.

I know silage is a good feed for horses, for I have tried it. I have not, however, fed to any great extent, because I did not have as much silage as I wanted for cows and horses both, and as I thought more of my cows than I did of my horses, the cows had all they needed and the horses had to go short. One winter we had a brood mare that was fed silage all winter, probably twenty pounds a day. She had some hay and straw to go with it, and no grain except what was in the silage, and she came out fat and with a glossy coat in the spring and had a fine, healthy colt. Horses like silage as well as cattle do after they get accustomed to it.

A man in Michigan a few years ago wintered two hundred horses on silage and straw exclusively, with no grain. They came through in fine shape and the brood mares all had fine strong colts.

The Ohio Experiment Station tried feeding horses on silage through the winter and reported that they came through until spring in the best condition. Mr. W. C. Bradley of Hudson, Wis., says that one year during spring he was out of hay and the only coarse fodder his horses had during all that period of hard work was silage. He says that his horses never stood work better.—C. F. McKarrow.

Better Situation Continues Very Firm.

The light receipts and the active demand still hold as the basis of the very satisfactory condition of the butter market. While it would be unsafe to predict further advances, the situation is certainly not suggestive of lower quotations as long as receipts continue light and quality reasonably good.

But before long there will be considerable frosty butter, and the output will of course gradually change to the quality produced by fall feed and dry fodder, but for strictly choice butter the lowest figure is 27 cents for actual sales. Undergrades are in much larger supply than best lots and their proportion continues to increase, so that most dealers report demand moderate, the reason being that there is so much of these qualities on sale. Storage butter is selling well because of the high price of the better grades, and the

stock in reserve is being steadily reduced, a fact which tends to sustain the market, buyers and sellers alike realizing that the stock which can be drawn upon has its limits, which are being steadily approached. In fact, there is now no great amount of strictly choice butter being offered, and as the season advances, the proportion must grow less, whatever may be said of the total output. Output also must continue to increase when the industry is on the dry feed basis. Butter in box and print forms continues to command a full premium over tub butter; the difference being one cent between the top grades.

Cheese remains in light receipt, but advancing prices are justified by the local situation as well as by the advances in Western and country markets. Top quotations are 12¢ cents.

Better Prices for Milk.

The new winter price for Boston milk is 38¢ cents per 54 quart cans delivered at Boston, from which are deducted the usual some charge for freight, etc., and two cents for washing the cans. The feature of the new arrangement, which will prove very satisfactory to the officers of the milk company, is the more uniform nature of the agreement on the part of the contractors. The pressure of the associated dealers, combined with the threat of holding the milk on the part of the shippers, seems to have brought into line the Boston Dairy Company, otherwise the redoubtable Mr. Granstein, and likewise the C. P. Hood & Co. Granstein still holds out against the Knapp plan as applied to one or two sections in his territory, claiming that his present plan is more satisfactory to producers in that section, and suggesting that he will offer them their choice. The arrangement as it stands is certainly a victory for the producers.

The Boston contractors will lose nothing by the slight advance paid to producers; for what concession they have made they will exact big returns from the consumers. The retail price of milk has been advanced to 8 cents a quart in place of 7 cents, the old price, so that the producers will likewise make a larger profit than before. They will pay the contractors 45 cents a can instead of 46 cents. "This increased cost comes," said President Whiting of D. Whiting & Sons, "on account of the increased cost of production and the shortage of milk. The demand for milk is increasing all the time, and the production is not keeping pace with it. There is nobody in the milk business who can afford to sell for any less." Said H. P. Hood of H. P. Hood Company: "The increase has been made at the demand of the farmer. The Board of Health requires much better milk and the restrictions placed on the producers make the expense larger." The situation so far as considered in these remarks could hardly have been explained better by the representatives of the producers themselves. They have based their demand on increased cost of production because of the high cost of feed, labor, cows, etc., and because of the expensive restrictions and changes imposed by the Board of Health. They have contended that the milk as now produced costs more and is also worth more from the standpoint of the consumer. The increase is certainly much less than might fairly have been demanded under the circumstances. The contractors, when the matter is figured down to a practical basis, merely wash the cans at a lower price than before. Instead of charging two cents for washing the cans they charge one-half cent under the new conditions. As the law prohibits returning cans containing any offensive material, it is probable that they could have been forced to wash the cans free of charge. At any rate, they should have been compelled to do so by the present law, or one which could have been enacted the coming session, this measure being no more than a fair offset to the severe restrictions of the boards of health on the producers. The new milk trade does not even yet fairly compensate the farmers for the increased cost of production. Milk is now selling lower comparatively than other farm products, and unless a further advance is made the shortage admitted by President Whiting will tend to further increase; for the reason that farmers will find other products more profitable than milk shipping to wholesalers under present terms.

The general scarcity of milk in the East is shown by the action of New York contractors in advancing the price the first of the month three cents per can for high-grade certified milk, followed by a corresponding advance for the other grades of milk. The scarcity of milk has been an item leading to the shortage of milk at New York. The retail price of milk is to be raised to 10 cents a quart for milk in cans and 9 cents for bottled milk. Certified milk will be retailed at 15 cents a bottle and cream of corresponding grade 10 cents per half pint. Certified milk is produced under the supervision of the Medical Society of the county of New York, and shipped and delivered under seals prescribed by the society.

Dairying and the Feed Outlook.

The feed situation is attracting some attention from New England dairymen whose interests lie rather in the direction of low prices than of high quotations, for the reason that they, as a class, buy much more feed than they produce for sale. Although the crop reports have indicated large yields of everything except oats, prices have not

Apples in Demand, Prices Higher.

The apple market continues satisfactory to all parties, demand being good and prices maintained. Dealers are doing an active business and making steady returns to shippers. The stock on sale is mostly fall varieties, but some early Greenings and Baldwins are on sale. These bring about the same as the average of the fall varieties, or in the vicinity of \$2 a barrel. Stock which is decidedly of the windfall quality sells lower.

Pears tend higher. The usual shipments from eastern New York and the Hudson valley districts are lacking this year, and native stock, although a good crop, has much of the market to itself for the shorter varieties and brings good prices. There are numerous small orchards of Seckels and Sheldons and other October varieties around New England which it will pay to ship this season. Anything fairly good brings around \$1.50 a box. These should be sorted so as to have all one grade and quality in a box and uniform. Boxes should be packed tightly and carefully, and as large shipments as possible sent at one time, as dealers do not take so much pains with small shipments. Cranberries are selling a trifle higher, and quality grows better as the late kinds come into market.

Vegetable Markets Quiet.

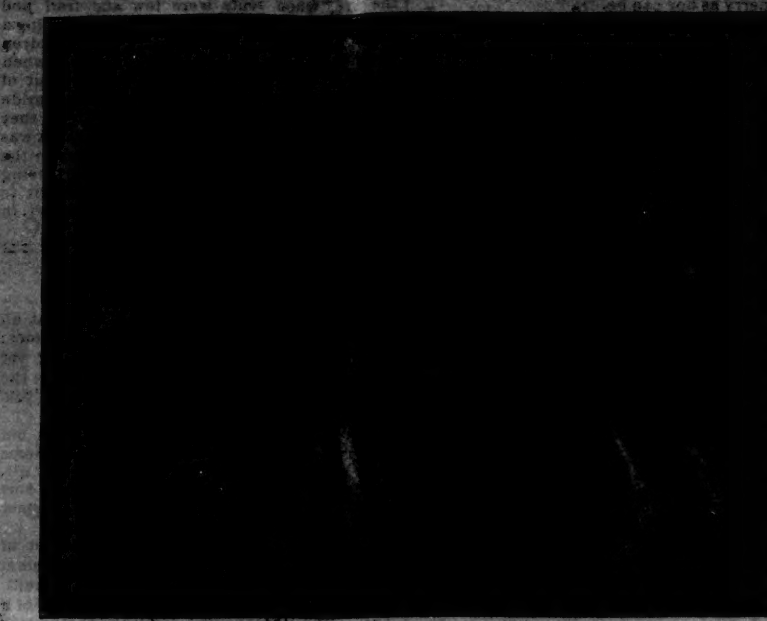
Potato trade is quiet, with prices ranging lower on account of large receipts. Hardly anything sells above 35 cents, although the common asking price is 35 cents for standard Maine varieties. Cabbages tend higher, the crop being light all through the Eastern States on account of the dry weather during the main growing season. Cucumbers are very scarce, but few of the outdoor kind being on sale. Dry weather and disease combined about finished the cucumber crop this year. Good onions sell at firm prices, but there is a great quantity of poor onions that sell slowly at bottom figures quoted. Tomatoes are becoming scarce and prices are firm. Those on sale are mostly ripened indoors from green stock. Tomatoes are rather slow of sale, partly in sympathy with the low prices of potatoes.

Eggs Higher.

The egg market has advanced another peg this year and the trade is wondering where the situation will find a terminus point. The season is at hand when lower prices cannot be expected and where any change should be in an upward direction. It is now only about six weeks before the Thanksgiving demand will call for big supplies, and the tendency would be to hold any surplus from now on for later markets. Hence, even without lighter receipts prices could hardly go down, and the question is what will be the quotation at Thanksgiving and Christmas, supposing the season to be as usual at that time of year. Receipts can hardly fall to decrease. In fact, arrivals at Western points and from Northern parts of the country are already considerably lighter. Both present situation and outlook are excellent. The advance in price this week is fairly shared by Western stock, which arrives in first-rate condition on account of the cool weather. The season is the most favorable part of the year for long-distance shipments, being without danger either from heat or cold. Refrigerator eggs are coming out in moderate quantities at prices which show some profit to holders.

Moving the Potato Crop.

Moving the big crop of Arrostook County potatoes is giving no end of trouble to the railroads. It was thought the big shipment from the Arrostook County would relieve the situation this season. Potatoes are being shipped from the producing section to the seaboard, the stock stored in the sheds, and shipment by steamer to Boston or New York, and the cars returned promptly to



CLYDESDALE STALLION CARBROOK.

A prize winner at Scottish shows. Possesses most of typical qualities of this useful breed.

shown a declining tendency but have gone in the other direction, and the outlook does not indicate the low prices that might have been expected from the large yields. Even the record breaking crop has not prevented corn and corn products holding at a rather high level. The inflation which has affected prices of nearly all products is, no doubt, largely the cause of the high grain prices. The export demand has been good, and the home demand very large. Western farmers, too, have taken to the practice of holding back their grain to some extent, thus avoiding the usual pressure of the market at the time of harvesting, and tending to a higher level of prices. It is also claimed that the raising of the new Durum wheat in the Northwest decreases the supply of bran, mill feed, etc., because this kind of wheat is nearly all shipped abroad or sent to manure factories, being out of favor with the flour manufacturers.

The shortage in Western hay is also thought to affect prices of feed; farmers of those sections being compelled to feed much more grain than usual because of the lighter supply of hay. In view of the feed outlook it is hard to see how dairy products can go lower. In fact, they have been steadily advancing for many weeks, and the advance in the wholesale milk market in leading cities is quite in line with the general situation.

The higher prices for dairy products will no more than offset the outlay that will be apparently necessary for cattle feed. The fact that many New England farmers have so much hay, ensilage, corn, soy beans, etc., that they will not have to buy the usual amount of grain, will be a point in their favor as compared with Western competitors.

Cranberries Selling Better.

The later kinds of cranberries are selling better and demand is increased somewhat on account of cooler weather. Dark varieties brought \$6 to \$6.50 in New York. There are still some light colored berries and these sell around \$5.

The cranberry crop of Long Island is expected to amount to around thirty thousand bushels, and this stock is selling in New York at \$1.75 a bushel.

Competitive buying has been a feature in the Cape Cod cranberry section. One leading firm has been offering higher prices than the others and has apparently obtained the bulk of the fruit sent from the shipping sections. Whether this situation represents an attempt to corner the cranberry market remains to be seen.

The cranberry business in Oregon has made some progress and it is thought the crop this year will amount to about two thousand barrels, which would be enough to supply the markets of the north Pacific coast and would offset to a corresponding extent the usual shipments from the East. These Pacific coast cranberries are reported of fair size and good color.

Office Makes Increase.

The Bureau of Internal Revenue in the report of the manufacture of oleo for the fiscal year ending June 30, 1909, gives the total output at \$5,145,000 pounds, an increase for the year of 3,500,000 pounds. Until the detailed report is given out it does not show the amount of colored and uncolored. The figures should be an object lesson to creamerymen, proving that the competition of oleo with medium and poor butter is still with us, and that no limitation, however good, can fill the demand for the best.

Apple News and Notes.

According to A. A. Goodman, secretary of the Missouri Horticultural Society, Missouri orchards first in number of apple trees, the orchards including about twenty-five million. New York has places second, Illinois third, and Michigan fourth. The Western trees, however, being younger and smaller, bear a lighter crop than those of the older States. The orchards of the Southwest, as a rule, are shorter lived than those of the East, although they come into bearing earlier. Secretary Goodman thinks the apple crop this year will bring Missouri fruit growers fully \$10,000,000, with a crop of about nine million barrels, which he thinks should sell at \$1 per barrel on trees. The cost of bringing an orchard to bearing he reckons at \$35 per acre in five years time. A good tree would bear three to five barrels, and trees are planted seventy to the acre.

An enormous proportion of the Western apple crop will be put into byproducts, including vinegar, cider jelly and evaporated stock. The markets are largely bare of these products on account of the light crop and high prices of the past year. It is not likely that these distant sections will ship to the East anything but the choicest grades on account of the high cost of freight. The evaporators and jelly makers of the East, however, will feel keenly the competition of the West this season. Most of the larger Western plants are reported running to their full capacity. The difficulty in getting pectin will tend to increase the cost of apples which will be taken out of the trees and sold for distilling or evaporation. Fishers in the Southwest around \$5 a day, and complained that they were scarce at any price. The difficulty of harvesting the crop tends to check buying the orchards in many cases. It is hard to see how some of these Western orchards can fall so low to waste for lack of buyers and harvesters at the right time.

The apple growers of the Southwest will

no doubt have a large supply available for export, notwithstanding the recent loss from blight rot, etc. Good authorities in that section agree fairly well that the loss from blight will amount to 10 to 15 per cent of the crop in the Central region of Arkansas and Missouri, but even with that deduction there will be a great many apples that cannot be sold in the Southern or Western markets. Some growers believe a regular series of weekly trains of apples for export should be sent to shippers from that region. These apples from the Central West and Southwest seem to bring good prices in England, netting the shippers \$2 to \$4 at New York, but the expense of getting the fruit from the orchards to the shipping points is large. Thus when fruit can be bought in the orchard ungraded and ungathered at 60 cents a barrel, it will cost \$1.50 to \$1.75 delivered at New York.

Western New York shippers find about five cents saving in shipping apples by way of Montreal. This difference in cost will discriminate slightly against the ports of the eastern United States, but the fruit will be heavier on the journey.

The crop of Rome Beauty and Ben Davis is reported large and fine around Miller City, O., with a yield of something like ten thousand barrels. Buyers are paying \$2 to \$2.25.

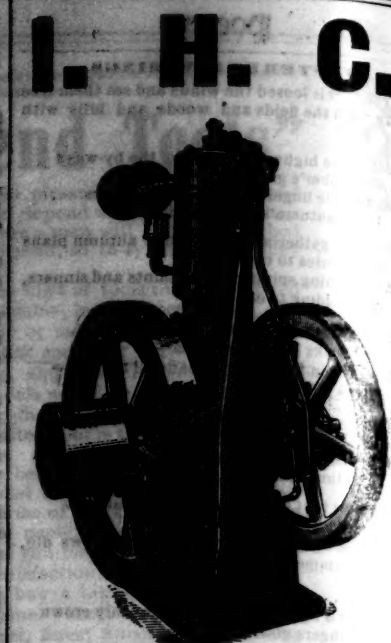
Lefthardt Commission Company: "Western growers expect last year's prices, and dealers refuse to accede to their ideas, hence are buying comparatively few apples."

The apple growers of eastern Washington are complaining more than ever of ravages of the San Jose scale. Some of the older orchards are reported entirely ruined. Growers of this section have heretofore been quite free of many of the fruit pests which are giving trouble to the South and East. Their advantage in these respects is being steadily reduced.

Manager Rodgers of the Oark Fruit Growers Association estimates that about one-fourth of the crop in southwest Missouri will rot on the ground, on account of lack of facilities to handle a crop, and no buyers on the spot. The only way out of this is to export the apples in a co-operative way.

G. R. Meeker & Co., New York: "Our traveling representative confirms the report of large supplies of apples in the West, but many orchards of Ben Davis not thoroughly sprayed and cared for will be difficult for market. It is believed that a large amount of apples will be exported for the United States this year provided the price is made attractive for European markets."

The latest reports of apple sales at shipping points in western New York indicate that prices are fully maintained. Figures for stock suitable for export range around \$2 a barrel delivered at the railroad station.



FARM POWERS

Gasoline, Alcohol or Gas

Look well to the power you buy. Better get along the old way than buy a machine—an engine you can't depend upon to respond when you want power. The I. H. C. engines mean

GASOLINE ENGINE RELIABILITY

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